Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1–3 (canceled).

Claim 4 (Currently amended): An array of metal clusters, comprising:

a substrate;

monodispersed, thiol-stabilized gold clusters having metal-cluster radiuses of from about 0.7 nm to about 1.8 nm; and

a polylysine scaffold having a lateral definition of about 10 Å coupled to the substrate, in predetermined patterns on the substrate; and a plurality of gold clusters being coupled to the scaffold, the clusters having ~~an interparticle spacing~~ a distance between the edges of cluster cores of less than about 5 nm.

Claim 5 (Previously presented): An array, comprising:

a substrate;

a polylysine scaffold coupled to the substrate; and

a plurality of gold clusters coupled to the scaffold with an interparticle separation of less than about 5 nm, the gold clusters having at least one thiol ligand coordinated thereto, and

the clusters having metal-cluster radiuses of from about 0.7 nm to about 1.8 nm.

Claim 6 (Previously presented): The array of claim 5, wherein the gold clusters are electrostatically coupled to the scaffold.

Claim 7 (Previously presented): The array of claim 5, wherein the thiol ligand comprises an aryl group, an alkyl group, or both.

Claim 8 (canceled).

Claim 9 (Previously presented): The array of claim 7, wherein the thiol ligand comprises an acidic group.

Claim 10 (Previously presented): The array of claim 9, wherein the acidic group is a carboxylic acid group.

Claim 11 (Previously presented): The array of claim 10, wherein the thiol ligand is selected from thiopropionic acid or mercaptoundecanoic acid.

Claim 12 (Previously presented): The array of claim 5, wherein the substrate comprises silicon, silicon nitride, ultraflat glass, gold or a combination thereof.

Claim 13 (Previously presented): The array of claim 5, wherein the scaffold has a lateral definition of about 10 Å.

Claim 14 (Currently amended): The array of claim 4, wherein the ~~interparticle separation between clusters~~ distance between the edges of cluster cores is from about 1 nm to about 5 nm.

Claim 15 (Currently amended): The array of claim 5, wherein the ~~interparticle separation between clusters~~ distance between the edges of cluster cores is from about 1 nm to about 5 nm.